Claims

- 1. Method of fixing to the surface of a first part (1) composed of a metal material a second metal material (4) by melting a brazing alloy (3) adapted to the second material, the first material being composed of an intermetallic Ti-Al alloy, characterised in that a layer of nickel (2) is interposed between the first part (1) and the brazing alloy (3).
- 2. Method according to claim 1, wherein the second material is in the form of a second preformed part (4) and wherein the layer of nickel (2) and the brazing alloy (3) are pressed between the first and second parts (1, 4).
- 3. Method according to claim 1, wherein the second material is in the form of a coating which is applied to the assembly formed by the first part, the layer of nickel and the brazing alloy.
- 4. Method according to one of the preceding claims, wherein the layer of nickel is in the form of a preformed sheet (2).
- 5. Method according to one of claims 1 to 3, wherein the layer of nickel is in the form of a covering.
- 6. Method according to claim 5, wherein the covering of nickel is deposited by electrolytic means.
- 7. Method according to one of the preceding claims, wherein the layer of nickel (2) has a thickness of at least 30 μm and preferably of at least 40 μm .
- 8. Method according to one of the preceding claims, wherein the second material is a nickel-based alloy.

- 9. Method according to one of the preceding claims, wherein the whole to be treated is brought to a temperature higher than the melting temperature of the brazing alloy for at least 10 minutes in a vacuum.
- 10. Method according to claim 9, wherein the method is carried out under a residual pressure of less than 10⁻³ Pa.
- 11. Composite metal part such as can be obtained by the method according to one of the preceding claims, comprising a substrate (1) composed of an intermetallic Ti-Al alloy, covered with a plurality of successive layers, notably a first layer (5) containing the phases $\alpha 2$ -Ti₃Al, $\tau 2$ -Ti₂AlNi and $\tau 3$ -TiAlNi, second, third and fourth layers (6, 7, 2) formed respectively of the phases $\tau 4$ -TiAlNi₂ and γ' -Ni₃Al and of nickel, and a fifth layer (8) of brazing alloy connecting the fourth layer (2) to another metal material (4).
- 12. Part according to claim 11, wherein the first layer (5) contains islets (5-1) of α 2-Ti₃Al dispersed in a polyphase matrix (5-2) comprising τ 2-Ti₂AlNi and τ 3-TiAlNi.
- 13. Part according to claim 11, wherein the first layer comprises a first sublayer of α 2-Ti₃Al and a second polyphase sub-layer comprising τ 2-Ti₂AlNi and τ 3-TiAlNi.
- 14. Part according to claim 11, wherein the first layer comprises a first sublayer of α 2-Ti₃AI, a second sub-layer of τ 2-Ti₂AINi and a third sub-layer of τ 3-TiAINi.
- 15. Part according to any of claims 11 to 14, wherein the said other metal material (4) is a nickel-based alloy.